

IS 5795 : 1991
(Reaffirmed 2012)

भारतीय मानक

आर्थोडान्टिक्स प्लास, दंत शिखर और बंधन, होवे नमूने
का — आकृति, आयाम तथा परीक्षण
(पहला पुनरीक्षण)

(Reaffirmed 2017)

Indian Standard

ORTHODONTIC PLIERS, CROWN AND
LIGATING, HOWE'S PATTERN — SHAPE,
DIMENSIONS AND TESTS

(First Revision)

UDC 615.472 : 621.881 : 4 : 6.6.314-72



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BUREAU OF INDIAN STANDARDS
MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG
NEW DELHI 110002

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FOREWORD

This Indian Standard (First Revision) was adopted by the Bureau of Indian Standards, after the draft finalized by the Dental Instruments and Equipment Sectional Committee had been approved by the Medical Equipment and Hospital Planning Division Council.

This standard was first issued in 1970 covering specifications for crown and ligating dental pliers, Howe's pattern. It has been revised so as to retain the requirements in respect of the shape, dimensions and specific tests only as the specification part of the pliers is now covered in IS 12507 : 1988 'General requirements for dental pliers'. This standard is, therefore, intended to be used only in respect of the shape, dimensions and specific tests of Howe's pattern, crown and ligating pliers.

For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the results of a test or analysis shall be rounded off in accordance with IS 2 : 1960 'Rules for rounding off numerical values (revised)'. The number of significant places retained in the rounded off value should be the same as that of specified value in this standard.

*Indian Standard***ORTHODONTIC PLIERS, CROWN AND
LIGATING, HOWE'S PATTERN — SHAPE,
DIMENSIONS AND TESTS***(First Revision)***1 SCOPE**

1.1 This standard specifies the shape, dimensions and specific tests for Howe's pattern, crown and ligating pliers used in dentistry.

2 REFERENCES

2.1 The following Indian Standards are necessary adjuncts to this standard:

<i>IS No.</i>	<i>Title</i>
1501 (Part 1) : 1984	Method for vickers hardness test for metallic materials : Part 1 HV 5 to HV 100 (<i>second revision</i>)
12507 : 1988	General requirements for dental pliers

3 SHAPE AND DIMENSIONS

3.1 The shape and dimensions for crown and ligating pliers shall be as shown in Fig. 1.

3.2 The working ends of the pliers shall be plane in case of crown pliers and shall have cross cut

serrations in case of ligating pliers.

4 TESTS**4.1 Hardness Test**

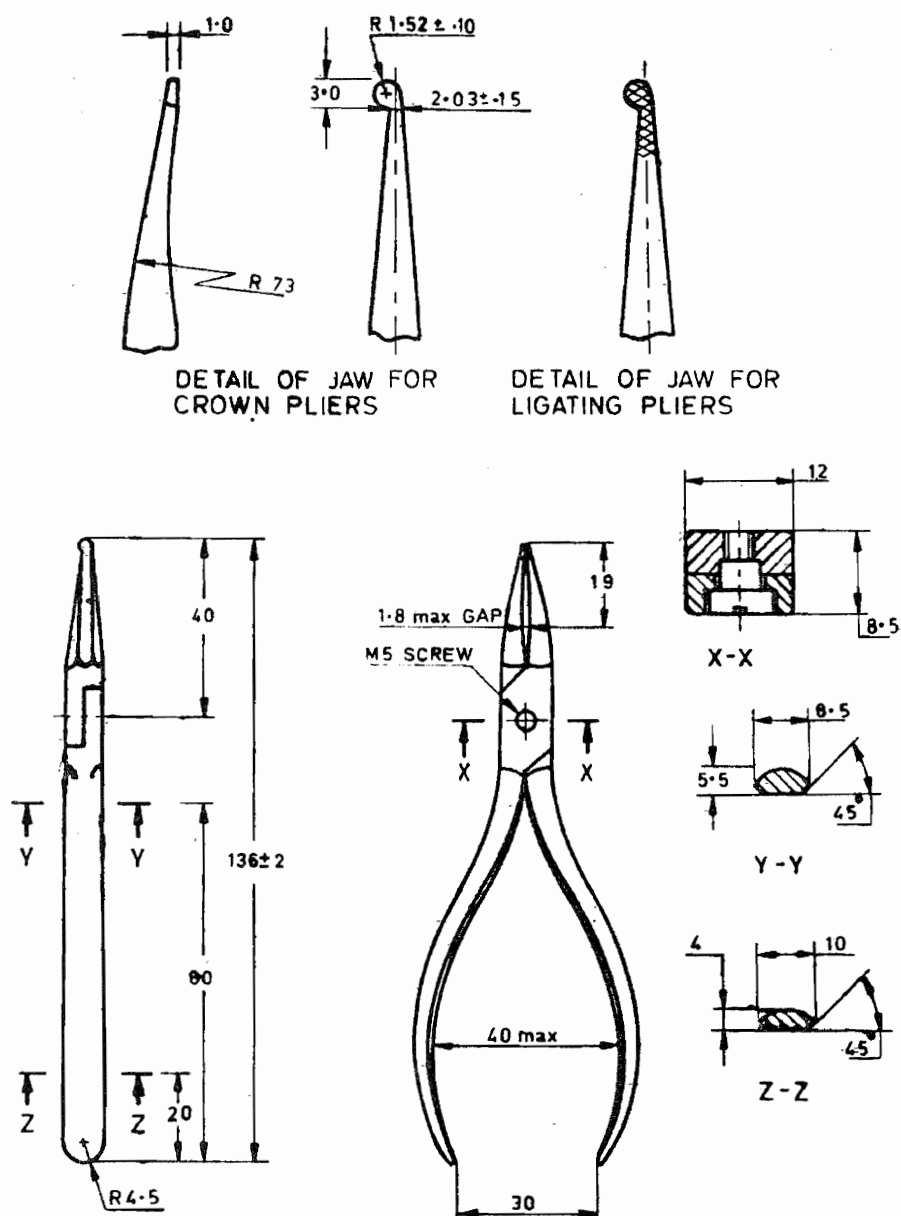
When tested in accordance with IS 1501 (Part 1) : 1984, the vickers hardness of the finished instruments (excluding screws) shall be 370 to 410 HV.

4.2 Performance Test

The pliers shall be used to pick up pins of 0.45 to 0.55 mm diameter lying on a smooth glass plate. The pliers shall do this easily.

4.3 Rigidity Test

The pliers shall be made to grip a piece of 5 mm thick mild steel plate in the jaws. A compressive force of 18 kgf shall be applied to the plier for 2 minutes such that the force acts on each handle (a total of 36 kgf on the instrument) at a distance of 25 mm from their free ends. This shall be done six times. On completion of the test, the plier shall show no sign of damage.



All dimensions in millimetres.

FIG. 1 CROWN AND LIGATING PLIERS, ORTHODONTIC

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Amend No.	Date of Issue	Text Affected

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AMENDMENT NO. 1 AUGUST 1973
TO
IS : 5796-1970 SPECIFICATION FOR WEIGHT SET.
DISC, FOR PHYSIO-THERAPY EXERCISERS
OTHER THAN PULLEY ARRANGEMENTS

Alteration

(*Title*) — Substitute the following for the existing title:

' Indian Standard

SPECIFICATION FOR
DISC TYPE WEIGHT SET FOR PHYSIO-THERAPY
EXERCISERS OTHER THAN PULLEY ARRANGEMENTS'

(CPDC 20)



Indian Standard

(Reaffirmed 2012)

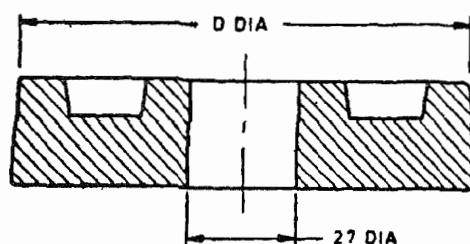
SPECIFICATION FOR

(Reaffirmed 2017)

WEIGHT SET, DISC, FOR PHYSIO-THERAPY
EXERCISERS OTHER THAN PULLEY ARRANGEMENTS

1. Scope — Dimensional and other requirements for disc type weights used with physio-therapy exercisers other than pulley arrangements.

2. Shape and Dimensions — As shown in Fig. 1.



Weight, kg	0
0.25	70
0.50	85
1.00	100
2.00	115
3.00	130

All dimensions in millimetres.

FIG. 1 DISC TYPE WEIGHT

3. Material — Cast iron.

4. Weights — Each set shall be supplied with two discs each of 0.25, 0.50, 1.0, 2.0 and 3.0 kg. A tolerance of ± 5 percent shall be allowed on the weight of each disc.

5. Workmanship and Finish — The castings shall be sound, clean and free from pits and blow-holes.

6. Marking — Each disc shall be marked with the following in raised letters:

- The manufacturer's name, initials or recognized trade-mark; and
- The denomination of the weight, for example, 0.25 kg.

6.1 ISI Certification Marking — Details available from the Indian Standards Institution, New Delhi 1.

7. Packing — As agreed to between the purchaser and the supplier.

Adopted 10 June 1970

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